

# 91901 5/19/01

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Yasmin Thanavala et al.

Art Unit:

1651

RECEIVED

Serial No:

09/420,695

MAY 1 7 2001

Filed:

10/19/1999

TECH CENTER 1600/2900

Examiner:

M. Flood

For:

ORAL IMMUNOLOGY

USING PLANT PRODUCT CONTAINING HEPATITIS

SURFACE ANTIGEN

### PETITION TO CORRECT INVENTORSHIP UNDER 37 C.F.R. §1.48

Commissioner for Patents Washington, D.C. 20231

Sir:

After filing of the above-identified patent application, it was determined that Hugh S. Mason should have been named as a joint inventor.

As evidenced by the enclosed Declaration, the above invention was made and reduced to practice by inventors, Yasmin Thanavala, Charles J. Arntzen and Hugh S. Mason. Without deceptive intent at the time of filing, it was not realized that Dr. Hugh S. Mason should have been added as an inventor for being intimately involved in design, creation and characterization of the transgenic plant material used in the studies incorporated into this patent application, which activities took place at his laboratory at Boyce Thompson Institute for Plant Research, Inc., Room 407, Tower Road, Ithaca, New

York 14853, either by Dr. Mason or others under his direct supervision.

05/16/2001 HMDHAMM1 00000091 09420695

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It is also agreed upon by the two assignees in this patent application, namely Health Research, Inc. and Boyce Thompson Institute for Plant Research, Inc., that Dr. Hugh S. Mason should be added as a co-inventor along with Dr. Yasmin Thanavala and Dr. Charles J. Arntzen as evidenced by the two enclosed Declarations under 37 CFR §1.48(a)(4).

In view of the foregoing and the enclosed Declarations of Yasmin Thanavala, Charles J. Arntzen, Hugh S. Mason and the Assignees, it is hereby respectfully requested that Hugh S. Mason be added as an inventor to the above-identified patent application.

Dated: May 8, 2001

Respectfully submitted

Michael L. Dunn

Attorney for Applicant(s)

Reg. No. 25,330

P.O. Box 10

Newfane, New York 14108

Telephone: (716) 433-1661

MLD/csc

RPP:156A US



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# CONSENT OF ASSIGNEE TO ADD INVENTORS UNDER 37 CFR §1.48(a)(5)

Commissioner for Patents Washington, D.C. 20231

Sir:

WHEREAS, Boyce Thompson Institute for Plant Research, Inc., an Assignee of record of the above-identified patent application as recorded in the U.S. Patent and Trademark Office records at Reel <u>010574</u> and Frame <u>0369</u>, and as evidenced by the enclosed copy of the Notice of Recordation of Assignment document;

THAT, Boyce Thompson Institute for Plant Research, Inc., has been notified of the situation wherein one inventor not previously named in the above-identified U.S. patent application should be added;

THAT, the originally named inventor Charles J. Arntzen has consented to the addition of the new inventor Hugh S. Mason and that the new inventor Hugh S. Mason

believes he has contributed to the invention and ishould be subsequently added as an inventor;

THAT, Boyce Thompson Institute for Plant Research, Inc., hereby consents to the addition of the aforementioned inventor, Hugh S. Mason.

THAT, all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

For and on Behalf of Boyce Thompson Institute for Plant Research, Inc.

Dated: 4/2

Typed Name: Jos

Name: Joyde L. Frank

Title: Director of Licensing & Intellectual

Property Management



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APRIL 28, 2000

**DUNN & ASSOCIATES** MICHAEL L. DUNN

BOX 10

NEWFAME, NY 14108

PTAS **DUNN & ASSOCIATED** M/V - 5 2000

RECEIVED

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/07/2000

REEL/FRAME: 010574/0369

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ARNTZEN, CHARLES J.

DOC DATE: 01/25/2000

ASSIGNEE:

BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC.

TOWER ROAD

ITHACA, NEW YORK 14853-1801

SERIAL NUMBER: 09420695

PATENT NUMBER:

FILING DATE: 10/19/1999

ISSUE DATE:

SHIRLIE SIMON, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

FORM PTO-15954 (1) CORDATION	03-02	3. DEPARTMENT OF COMMERC
(Rev. 6-93) OMB No. 0651-0011 (exp. 4/94)  PATE		Patent and Trademark Off
To the Honorable Commissioner of Patents and Trademathereof.  1. Name of conveying party(ies):	101279318	documents or copy
1. Name of conveying party(ies):  210 FEB -7 PM 12: 23	2. Name and address of receivin	•• • • •
Charles J. Orntzen  MAY 1 4 2001  Additional names of conveying party(ies) attached? [] Yes [X] No  RAPEL Of Conveyance:	Name: Boyce Thompson Research, Inc. Internal Address: Tower R	
[ ] Merger	Street Address: same as ab	ove
Security Agreement [ ] Change of Name  Other	City: Ithaca State: New York ZIP: 14853-1801  Additional name(s) & address(es) attached? [ ] Yes [ X ] N	
Execution Date: January 25, 2000		
If this document is being filed together with a new application, to A. Patent Application No.(s)  09/420,695	B. Patent No.(s)	
Additional numbers att	ached? [ ] Yes [ X ] No	
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications	and patents involved: 1
Name: Dunn & Associates	7. Total fee (37 CFR 3.41)	.\$ 40.00
Internal Address: P.O. Box 10	[X] Enclosed	
	[ ] Authorized to be charged	to deposit account
Street Address: same as above	8. Deposit account number:	
City: Newfane State: NY ZIP: 14108	(Attach duplicate copy of this pag	ge if paying by deposit account)
2000 BCDATES 00000054 09420695 DO NOT US	E THIS SPACE	
581 40.00 BP	D IIIIO DI AOL	
To the best of my knowledge and belief, the foregoing information original document; however, the above information is not to be a Michael I. Dunn	used to interpret the document which	ed copy is a true copy of the a speaks for itself.

Total number of pages including cover sheet, attachments, and document: 3

Signature

Name of Person Signing

Date

#### ASSIGNMENT OF INVENTION

WHEREAS, I, CHARLES J. ARNTZEN residing at 1005 Highland Road, Ithaca, New York 14850-1447, have invented certain new and useful improvements in:

# ORAL IMMUNOLOGY USING PLANT PRODUCT CONTAINING HEPATITIS SURFACE ANTIGEN

for which I have made application for Letters Patent in the United States; and for which the specification was filed on October 19, 1999, and assigned U.S. Serial No. 09/420,695;

AND WHEREAS, BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., Tower Road, Ithaca, New York 14853-1801, a corporation of the State of New York, is desirous of acquiring all interest in said invention, said application disclosing the invention and any Letters Patent which may be granted therefor:

NOW THIS INDENTURE WITNESSETH, that for the sum of One Dollar, and other valuable consideration to me in hand paid, the receipt whereof is hereby acknowledged, I hereby assign, sell and transfer unto said BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC. the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto;

And I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., as the Assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary and lawful future documents, including assignments in favor of BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., or its designee as BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., or its

Assignee may from time-to-time present to me in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to sign and properly execute such necessary and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the Assignee thereof shall hereafter require and prepare at its own expense.

<i>}</i> -	WITNESS, my hand and seal this 2 WITNESS:	day of January, 2000.  Charles J. Arntzen
	WITNESS:	
,,, ,	mm Koyske	
	STATE OF NEW YORK Arizance	
	COUNTY OF Maricopa	SS:
	On this <u></u> day of <u></u>	in the year of 2000, before me, the subscriber,
	personally appeared CHARLES J. ARNTZ	ZEN to me known to be the person described in and
•	who executed the foregoing instrument, and	who acknowledged that he executed the same.
	CAROL L. SMITH Notary Public - Arizona Marianna Carret	Caux Acamer

**Notary Public** 

Notary Public - Arizona Maricopa County

> Commission Expires Aug. 31, 2002

RPP:156A US

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

pplicants:

Yasmin Thanavala et al.

Art Unit:

1651

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Serial No:

09/420,695

MAY 1 7 2001

Filed:

10/19/1999

TECH CENTER 1600/2900

Examiner:

M. Flood

For:

**ORAL IMMUNOLOGY USING PLANT PRODUCT** CONTAINING HEPATITIS

SURFACE ANTIGEN

### CONSENT OF ASSIGNEE TO ADD INVENTORS UNDER 37 CFR §1.48(a)(5)

Commissioner for Patents Washington, D.C. 20231

Sir:

WHEREAS, Health Research, Inc., an Assignee of record of the above-identified patent application as recorded in the U.S. Patent and Trademark Office records at Reel 010682 and Frame 0660, and as evidenced by the enclosed copy of the Notice of Recordation of Assignment document;

THAT, Health Research, Inc., has been notified of the situation wherein one inventor not previously named in the above-identified U.S. patent application should be added;

THAT, the originally named inventor Yasmin Thanavala has consented to the addition of the new inventor Hugh S. Mason and that the new inventor Hugh S. Mason

believes he has contributed to the invention and should be subsequently added as an inventor;

THAT, Health Research, Inc., hereby consents to the addition of the aforementioned inventor, Hugh S. Mason.

THAT, all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

		].	1.
Dated:	. 5	/2	-/0/
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For and on Behalf of Health Research, Inc.

Machael D. DeLellis Director of Operations



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

JUNE 08, 2000

**DUNN & ASSOCIATES** MICHAEL L. DUNN P.O. BOX 10

NEWFANE, NY 14108

PTAS **DUNN & ASSOCIATES** JUN 1 9 2000

\*101320754A\*

RECEIVED

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/06/2000

REEL/FRAME: 010682/0660

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR''S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

THANAVALA, YASMIN

DOC DATE: 12/22/1999

ASSIGNEE:

HEALTH RESEARCH, INC. ELM AND CARLTON STREETS BUFFALO, NEW YORK 14263

SERIAL NUMBER: 09420695

PATENT NUMBER:

FILING DATE: 10/19/1999

ISSUE DATE:

LAWAN FLETCHER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

OMB No. 0651-0011 (exp. 4/94) 3 PATE!	Patent and Trademark Office
To the Honorable Commissione Patents and Tradema	101320754
1. Name of conveying party MAR -6 PM 2: 05	2. Name and address of receiving party(ies)
Yasmir Thanavala ADD (5.0)	Name: Health Research, Inc.
al and and an analysis of the state of the s	Internal Address: Elm and Carlton Streets
Additional perfe(s) of conveying party(jes) attached? [ ] Yes [X] No	
Mapellure of Conveyance:	-
[X] Assignment [] Merger	Street Address: same as above
	Sueet Address: Same as above
[ ] Security Agreement [ ] Change of Name	City: Buffalo State: New York ZIP: 14263
[ ] Other	City: Dullato State: New Fork ZIP: 14205
Execution Date: December 22, 1999	Additional name(s) & address(es) attached? [ ] Yes [ X ] No
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application, the	ne execution date of the application is:
A. Patent Application No.(s)	B. Patent No.(s)
09/420,695	
Additional numbers atta	ched? []Yes [X] No
5. Name and address of party to whom correspondence	6. Total number of applications and patents involved: 1
concerning document should be mailed:	o. Your manager of approximents and patients involved.
N. Dunn & Associator	
Name: Dunn & Associates	7. Total fee (37 CFR 3.41)\$ 40.00
Internal Address: P.O. Box 10	[X] Enclosed
	[ ] Authorized to be charged to deposit account
G	0 Demonit account must be
Street Address: same as above	8. Deposit account number:
City: Newfane State: NY ZIP: 14108	(Attach duplicate copy of this page if paying by deposit account)
DO NOT USE	E THIS SPACE
9. Statement and signature.	
To the best of my knowledge and belief, the foregoing information	
original document; however, the above information is not to be u	sed to interpret the document which speaks for itself.
Michael L. Dunn Mulcul	Muli 2, 2000
Name of Person Signing Signature	Date
Total number of pages including cover	er sheet, attachments, and document: 4
	th required cover sheet information to:
Commissioner of Patents &	Trademarks, Box Assignments
/12/2000 DNGUYEN 00000396 09420695 \ Washingto	n, D.C. 20231

40.00 OP

01 FC:581

#### **ASSIGNMENT OF INVENTION**

WHEREAS, I, YASMIN THANAVALA residing at 150 Presidio Place, Williamsville, New York 14221, have invented certain new and useful improvements in:

# ORAL IMMUNOLOGY USING PLANT PRODUCT CONTAINING HEPATITIS SURFACE ANTIGEN

for which I have made application for Letters Patent in the United States; and for which the specification was filed on October 19, 1999, and assigned U.S. Serial No. 09/420,695;

AND WHEREAS, **HEALTH RESEARCH**, **INC.**, Roswell Park Cancer Institute, Elm & Carlton Streets, Buffalo, New York 14263, a corporation of the State of New York, is desirous of acquiring all interest in said invention, said application disclosing the invention and any Letters Patent which may be granted therefor:

NOW THIS INDENTURE WITNESSETH, that for the sum of One Dollar, and other valuable consideration to me in hand paid, the receipt whereof is hereby acknowledged, I hereby assign, sell and transfer unto said **HEALTH RESEARCH**, **INC.**, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto;

And I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said **HEALTH RESEARCH**, **INC.**, as the Assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary and lawful future documents, including assignments in favor of HEALTH RESEARCH, INC., or its designee as HEALTH RESEARCH, INC., or its Assignee may from time-to-time present to me in order to perfect title

in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to sign and properly execute such necessary and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the Assignee thereof shall hereafter require and prepare at its own expense.

	WITNESS, my hand and seal this 2	2 day of <u>Dec.</u> , 1999.
	WITNESS: Howard J. Wallara II	Yasmin Thanavala
J1	WITNESS:	
, `	Galing aluin	
	STATE OF NEW YORK  COUNTY OF	SS:
	On this 22 nd day of December	in the year of 1999, before me, the subscriber,
	personally appeared YASMIN THANAVA	LA to me known to be the person described in and
	who executed the foregoing instrument, and	who acknowledged that he executed the same.
	CHERYL A. ZUBER  Notary Public, State of New York  No. 4865348  Qualified in Erie County  My Commission Expires July 1	Cheryl a. Buter Notary Public

## Address correction for Yasmin Thanavala:

157 Presidio Place, Williamsville, New York 14221

RPP:156A US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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pplicants:

Yasmin Thanavala et al.

**Art Unit:** 1651

MAY 1 7 2001

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TECH CENTER 1600/2900

Examiner:

M. Flood

For:

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SURFACE ANTIGEN

DECLARATION UNDER 37 C.F.R. §1.48(a)(2)

Commissioner for Patents Washington, D.C. 20231

Sir:

Yasmin Thanavala, Charles J. Arntzen and Hugh S. Mason declare:

THAT, Yasmin Thanavala and Charles J. Arntzen were the originally named inventors in the above-identified U.S. Patent Application;

THAT, at the time of filing the above-identified patent application, Yasmin Thanavala and Charles J. Arntzen inadvertently overlooked or did not realize that Hugh S. Mason had made a significant contribution to the conception of the invention through the design, creation and characterization of the transgenic plant material used in the studies incorporated into this patent application;

THAT, after about one year after the filing of the above application, it was brought to the attention of Boyce Thompson Institute for Plant Research, Inc. that Dr. Hugh

Mason should have been added as an inventor and that Yasmin Thanavala, Charles J. Arntzen and Hugh S. Mason all agree that the three of them are joint inventors and Hugh S. Mason should have been named as an inventor in the originally filed patent application;

THAT, the omission of Hugh S. Mason was in error and without deceptive intent; and

THAT, all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: 24 April 2001

Yasmin Thanavala

Dated: 17 April 200

Charles I Arntzen

Dated: 27 Opril 2007

Hugh S. Mason